U. S. DEPARTMENT OF COMMERCE
CHARLES SAWYER, Secretary
WEATHER BUREAU
F. W. REICHELDERFER, Chief

LOCAL CLIMATOLOGICAL SUMMARY

WITH COMPARATIVE DATA

1950

TUCSON, ARIZONA

Compiled under the direction of

Robert L. King

SAN FRANCISCO: 1951

LATITUDE 32° 08' N
LONGITUDE 110° 57' W
ELEVATION (ground) 2558 feet

METEOROLOGICAL DATA FOR THE CURRENT YEAR

TUCSON, ARIZONA
1950

Month	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Monthly	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Degree days	Precipitation: Total	Precipitation: Greatest in 24 hrs.	Precipitation: Date	Precipitation: Snow, Sleet, Hail: Total	Precipitation: Snow, Sleet, Hail: Greatest in 24 hrs.	Precipitation: Snow, Sleet, Hail: Date	Relative humidity: 5:30 a. MST	Relative humidity: 11:30 a. MST	Relative humidity: 5:30 p. MST	Relative humidity: 11:30 p. MST	Wind: Average hourly speed	Wind: Prevailing direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Percent of possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear	Number of days: Sunrise to sunset: Partly cloudy	Number of days: Sunrise to sunset: Cloudy	Number of days: Precipitation .01 inch or more	Number of days: Snow, Sleet, Hail 1.0 or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max. temp.: 90° and above	Number of days: Max. temp.: 32° and below	Number of days: Min. temp.: 32° and below	Number of days: Min. temp.: Zero and below
JAN.	64.1	36.7	50.4	84	20	17	6	445	0.30	0.18	2	0.0	0.0		58	36	30	52	6.3	SSE	33	SW	24	78	5.3	11	7	13	3	0	0	0	0	0	9	0
FEB.	71.3	43.0	57.2	79	18	32	1	216	1.48	1.22	11	0.0	0.0		56	32	26	49	5.4	SSE	28	SE	26	82	4.8	12	4	12	2	0	0	0	0	2	0
MAR.	76.2	45.1	60.7	92	30	35	13	154	0.26	0.21	25-26	0.0	0.0		43	23	17	32	6.6	SSE	41	SW	25	88	4.6	13	9	9	4	0	1	0	1	0	0	0
APR.	85.5	52.9	69.2	95	21	40	10	22	T	T	8	0.0	0.0		32	15	11	22	7.0	SSE	26	S	22	93	2.9	18	8	4	0	0	0	0	5	0	0	0
MAY	88.1	55.0	71.6	96	21	38	5	21	0.01	0.01	4	0.0	0.0		27	15	10	19	6.8	SE	29	W	4	94	2.9	21	4	6	1	0	0	0	14	0	0	0
JUN.	98.4	64.8	81.6	107	29	53	8	0	1.24	1.12	21-22	0.0	0.0		33	16	15	23	6.6	SSE	42	S	21	90	2.0	22	5	3	2	0	3	0	29	0	0	0
JUL.	93.5	72.1	82.8	106	1	67	30	0	3.72	1.51	21-22	0.0	0.0		69	46	41	61	6.5	SE	51	NE	1	66	7.3	1	15	15	16	0	16	0	22	0	0	0
AUG.	98.4	71.0	84.7	108	31	67	1	0	0.86	0.35	12	0.0	0.0		52	28	24	42	6.4	SSE	46	W	11	92	3.0	17	12	2	5	0	6	0	31	0	0	0
SEP.	92.4	64.2	78.3	107	1	55	23	0	1.15	1.13	7	T	T	7	47	24	21	38	6.9	SSE	46	S	7	89	2.5	19	8	3	2	0	3	0	24	0	0	0
OCT.	92.5	61.1	76.8	99	8-11	52	28	0	T	T	14+	0.0	0.0		38	21	17	29	5.1	SSE	26	E	12	95	2.3	23	4	4	0	0	1	0	26	0	0	0
NOV.	79.0	47.0	63.0	86	26	37	12	72	T	T	14-15	0.0	0.0		43	26	23	37	6.7	SSE	38	E	10	96	3.2	19	6	5	0	0	0	0	0	0	0	0
DEC.	73.0	40.8	56.9	82	10	34	28	242	0.27	#		T	T	31	39	23	23	38	6.8	SSE	33	W	31	94	4.0	18	5	8	1	0	0	0	0	0	0	0
Year	84.4	54.5	69.4	108	AUG. 31	17	JAN. 6	1172	9.29	1.51	JUL. 21-22	T	T	SEP. 7+	45	25	22	37	6.4	SSE	51	NE	JUL. 1	88	3.7	194	87	84	36	0	30	0	152	0	11	0

This datum will be attributed to January 1951.

MEANS AND EXTREMES FOR PERIOD OF RECORD

Month	Temperature: Means: Daily maximum	Temperature: Means: Daily minimum	Temperature: Means: Monthly	Temperature: Extremes: Record highest	Temperature: Extremes: Year	Temperature: Extremes: Record lowest	Temperature: Extremes: Year	Mean degree days	Precipitation: Mean total	Precipitation: Maximum monthly	Precipitation: Year	Precipitation: Minimum monthly	Precipitation: Year	Precipitation: Maximum in 24 hrs.	Precipitation: Year	Precipitation: Snow, Sleet, Hail: Mean total	Precipitation: Snow, Sleet, Hail: Maximum monthly	Precipitation: Snow, Sleet, Hail: Year	Precipitation: Snow, Sleet, Hail: Maximum in 24 hrs.	Precipitation: Snow, Sleet, Hail: Year	Relative humidity: 5:30 a. MST	Relative humidity: 11:30 a. MST	Relative humidity: 5:30 p. MST	Relative humidity: 11:30 p. MST	Wind: Mean hourly speed	Wind: Prevailing direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Year	Pct. of poss. sunshine	Average sky cover sunrise to sunset	Mean number of days: Sunrise to sunset: Clear	Mean number of days: Sunrise to sunset: Partly cloudy	Mean number of days: Sunrise to sunset: Cloudy	Mean number of days: Precipitation .01 inch or more	Mean number of days: Snow, Sleet, Hail 1.0 or more	Mean number of days: Thunderstorms	Mean number of days: Heavy fog	Mean number of days: Max. temp.: 90° and above	Mean number of days: Max. temp.: 32° and below	Mean number of days: Min. temp.: 32° and below	Mean number of days: Min. temp.: Zero and below
(a)	10	10	10	10		10		10	10	10		10		10		10	10		9		10	10	10	10	5	2	3			3	9	10	10	10	10	10	10	10	10	10	10
J	62.9	37.3	50.1	84	1950	16	1949	462	0.72	2.22	1946	T	1948	1.40	1946	0.5	4.7	1949	3.5	1949	66	42	38	61	7.4	SSE	40	SW	1949	75	4.7	13	9	9	4	*	*	*	0	0	8	0
F	67.9	39.8	53.8	89	1943	20	1948	317	1.01	2.27	1941	0.02	1947	1.49	1942	0.1	1.1	1946	1.1	1946	63	37	30	54	6.7	SSE	30	E	1949	77	4.8	11	7	10	4	*	*	*	0	0	5	0
M	72.3	43.1	57.7	92	1950	28	1942+	234	0.61	1.46	1941	0.19	1949	1.18	1943	T	0.1	1949	0.1	1949	56	31	26	46	7.4	SSE	41	SW	1950	84	4.6	14	7	10	4	0	1	*	0	0	1	0
A	81.8	50.3	66.0	102	1943	27	1945	77	0.31	1.06	1941	T	1947+	0.74	1941	0.0	0.0		0.0		44	23	18	34	7.5	SSE	33	E	1949	92	3.7	15	9	6	2	0	*	0	6	0	0	0
M	90.3	57.5	73.9	105	1947	38	1950	7	0.21	0.89	1943	0.00	1942+	0.89	1943	0.0	0.0		0.0		34	17	13	25	7.4	SE	30	SW	1948	94	2.9	19	7	5	1	0	*	0	19	0	0	0
J	98.6	65.7	82.1	109	1942	52	1944	0	0.16	1.24	1950	0.00	1942+	1.12	1950	0.0	0.0		0.0		32	17	14	24	7.5	SSE	42	S	1950	91	2.3	21	7	2	1	0	2	0	28	0	0	0
J	99.7	73.7	86.7	110	1942+	65	1941+	0	1.98	3.72	1950	0.27	1947	2.26	1945	T	T	1948+	T	1948+	55	32	29	45	7.2	SE	52	NW	1948	73	5.6	9	12	10	9	0	11	0	29	0	0	0
A	97.1	71.8	84.5	109	1944	64	1942	0	2.17	4.31	1945	0.86	1950	1.50	1943	0.0	0.0		0.0		65	38	35	54	6.8	SSE	46	W	1950	86	4.6	11	13	7	9	0	12	0	30	0	0	0
S	94.5	67.7	81.1	107	1945+	48	1941	*	1.46	3.59	1943	0.14	1945	2.73	1943	T	T	1950	T	1950	56	33	29	46	7.3	SSE	46	S	1950	85	3.3	18	8	4	5	0	6	0	24	0	0	0
O	84.2	56.3	70.2	99	1950	35	1949	31	0.63	1.13	1944+	T	1950	0.84	1945	0.0	0.0		0.0		56	32	29	47	6.8	SSE	47	SE	1948	90	3.3	19	8	4	4	0	3	0	8	0	0	0
N	74.0	43.9	59.0	90	1947	28	1942+	197	0.45	1.78	1944	0.00	1943+	0.88	1946	0.0	0.0		0.0		51	29	28	46	7.1	SSE	42	NW	1948	96	3.1	19	7	4	2	0	1	*	*	0	2	0
D	65.9	38.9	52.4	82	1941+	22	1945+	390	0.82	2.01	1941	0.27	1950	0.90	1941	0.3	1.4	1949	1.4	1949	62	40	38	57	7.2	SSE	44	W	1949	77	4.6	14	7	10	4	*	*	*	0	0	6	0
Year	82.4	53.8	68.1	110	JUL. 1942+	16	JAN. 1949	1715	10.53	4.31	AUG. 1945	0.00	MAY 1942+	2.73	SEP. 1943	0.9	4.7	JAN. 1949	3.5	JAN. 1949	53	31	27	45	7.2	SSE	52	NW	JUL. 1948	85	4.0	183	101	81	49	*	36	*145	0	22	0

(a) Length of record, years.

AVERAGE TEMPERATURE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An'l.
1900	52.9	52.1	62.7	59.1	74.6	82.6	88.3	82.7	76.6	68.5	60.2	51.6	67.6
1901	51.0	52.0	55.6	61.7	72.2	79.4	87.3	84.8	79.6	69.4	61.4	50.4	67.1
1902	50.4	52.6	54.1	66.3	71.5	83.1	84.4	84.1	79.8	71.0	55.0	50.3	66.9
1903	48.9	45.3	55.1	62.2	70.0	80.4	85.8	85.8	78.4	67.4	60.1	51.8	65.9
1904	45.4	56.2	60.2	63.9	72.8	81.8	84.9	82.4	77.0	68.4	58.7	47.8	66.6
1905	48.7	50.6	54.0	58.4	64.6	77.8	84.2	86.1	80.4	69.8	57.6	47.2	65.0
1906	50.6	55.2	58.4	62.0	69.7	80.0	86.2	81.8	79.1	68.8	57.8	53.5	66.9
1907	51.4	56.0	58.4	65.2	70.8	78.0	85.8	83.0	80.0	69.6	58.1	51.4	67.3
1908	51.2	51.4	58.8	64.2	68.2	79.2	83.8	82.4	78.2	63.8	58.0	51.0	65.8
1909	53.8	50.4	53.0	63.4	68.6	81.4	85.0	82.8	77.8	67.7	57.3	47.4	65.7
1910	50.0	50.1	63.1	66.8	75.3	82.8	85.8	85.3	82.0	70.4	58.0	52.6	68.5
1911	54.6	51.8	62.7	64.8	72.7	81.4	83.6	85.0	81.2	67.0	51.0	45.0	66.7
1912	50.6	51.7	55.9	58.7	70.7	83.0	81.6	82.6	76.8	65.6	57.2	45.8	65.0
1913	44.8	50.2	53.9	64.0	71.1	78.2	83.5	83.5	78.0	66.9	59.5	48.8	65.2
1914	53.8	52.3	60.7	65.8	73.6	82.2	83.1	84.2	80.0	66.8	60.4	47.5	67.5
1915	46.8	51.0	53.8	61.2	67.0	81.2	87.2	86.9	78.4	70.7	57.2	49.4	65.9
1916	50.8	57.9	61.6	64.0	70.4	80.2	84.4	82.8	79.4	66.2	55.4	47.0	66.7
1917	48.6	50.1	53.6	61.8	66.6	82.2	85.6	83.1	80.1	70.8	60.2	53.0	66.3
1918	47.8	54.6	60.9	64.2	69.6	85.4	86.2	81.8	81.4	70.0	56.2	49.0	67.3
1919	47.6	48.0	54.9	65.5	72.0	82.4	83.1	83.2	76.9	64.0	57.5	52.8	65.7
1920	51.8	55.2	54.8	58.5	71.8	79.8	87.4	82.6	77.2	65.0	56.8	47.3	65.7
1921	52.0	54.0	60.7	61.6	69.0	79.5	84.1	81.8	78.6	70.6	58.3	54.4	67.0
1922	48.0	52.6	55.4	60.6	73.4	83.0	85.6	84.2	80.6	69.4	53.0	53.6	66.6
1923	54.0	53.8	56.0	64.2	74.3	78.4	84.5	80.8	76.7	65.4	56.0	49.8	66.2
1924	48.8	54.3	52.4	61.6	73.8	84.4	86.6	86.1	81.8	67.4	59.5	50.4	67.3
1925	47.6	56.4	60.5	65.4	74.9	80.3	88.2	83.6	78.2	68.1	56.2	50.3	67.5
1926	46.2	55.3	59.6	64.7	72.0	82.5	85.5	86.0	80.9	71.2	59.0	50.6	67.8
1927	54.8	56.4	57.0	64.8	73.2	80.3	87.0	84.0	78.9	69.1	61.7	48.3	68.0
1928	50.8	52.0	60.3	62.9	75.4	82.0	87.2	83.5	81.0	70.6	57.9	49.8	67.8
1929	48.0	49.8	55.8	62.3	73.2	81.6	86.2	84.2	79.7	69.7	54.0	52.8	66.4
1930	49.8	55.8	56.6	67.9	70.0	82.7	85.9	85.3	78.2	67.3	57.8	50.3	67.3
1931	49.8	53.6	57.8	67.2	73.4	81.5	88.6	82.2	80.5	68.8	54.0	48.4	67.2
1932	43.3	54.6	57.4	63.5	71.7	79.6	85.5	85.2	80.6	67.8	60.0	47.2	66.4
1933	47.7	47.5	57.8	60.6	67.1	82.4	87.4	85.8	81.6	72.0	59.4	52.2	66.8
1934	49.4	56.4	63.9	69.0	78.4	79.8	87.8	83.6	79.6	70.6	56.7	52.3	69.0
1935	52.1	55.0	55.0	64.7	67.6	82.0	85.7	82.3	78.3	68.8	54.6	51.5	66.5
1936	48.8	53.2	59.0	66.9	75.3	83.8	86.8	83.8	77.6	68.6	59.9	50.8	67.9
1937	41.2	52.8	56.0	62.8	73.8	81.2	86.3	86.0	81.8	71.0	59.4	54.3	67.2
1938	52.4	54.2	57.6	65.5	71.3	81.8	84.4	83.3	81.2	70.0	54.8	53.0	67.5
1939	50.4	45.5	59.2	67.2	74.0	82.6	87.2	84.6	79.4	67.5	62.2	56.2	68.0
1940	52.6	52.8	59.9	65.4	76.0	83.4	87.2	84.4	80.8	70.7	56.8	56.5	68.9
1941	52.6	56.5	56.9	59.8	72.9	80.2	86.4	83.2	79.4	67.2	60.6	52.0	67.3
1942	53.0	50.8	55.8	63.6	73.1	82.9	89.8	85.2	81.6	69.4	63.2	54.2	68.5
1943	52.8	58.7	61.8	70.4	76.3	83.2	88.0	83.9	82.0	70.8	61.6	52.5	70.2
1944	50.4	50.7	56.4	63.0	73.4	80.6	87.4	86.4	79.6	72.8	55.9	52.3	67.4
1945	50.7	53.6	54.6	63.4	73.6	78.9	86.5	84.2	80.9	71.6	58.5	50.4	67.2
1946	48.0	52.0	59.4	70.6	73.0	85.4	86.0	84.0	80.9	65.9	54.8	55.6	68.0
1947	48.4	57.8	59.6	64.8	76.8	82.1	88.2	83.7	83.0	70.4	54.2	48.2	68.1
1948	51.5	50.8	54.0	68.0	75.1	83.4	86.8	85.2	82.6	71.1	53.6	51.2	67.8
1949	43.0	50.2	57.6	67.4	73.4	83.0	85.0	84.2	82.2	66.4	64.3	50.8	67.3
1950	50.4	57.2	60.7	69.2	71.6	81.6	82.8	84.7	78.3	76.8	63.0	56.9	69.4

TOTAL PRECIPITATION

TUCSON, ARIZONA
1950

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	.16	.49	.54	1.12	T	.17	.65	.95	.85	.41	2.45	T	7.79
1901	1.15	1.38	.64	.04	.41	.00	2.57	1.99	.28	1.18	.08	.00	9.72
1902	.53	T	.44	T	T	.19	.42	1.31	.58	1.64	1.34	2.15	8.60
1903	.00	1.11	1.63	.00	.20	.22	1.52	2.67	1.17	.00	.00	.28	8.80
1904	.20	.54	.06	.00	.61	.18	1.75	2.65	.89	.04	T	.93	7.85
1905	2.25	4.15	3.88	3.53	.02	.24	1.10	.56	2.84	.09	4.61	.90	24.17
1906	.50	.33	.33	.50	T	.00	1.82	2.53	.43	T	.74	4.57	11.75
1907	1.76	.75	.56	.15	.43	T	4.27	3.46	.80	1.13	.78	.00	14.09
1908	.76	2.08	.39	.10	.16	T	4.77	2.18	.55	.26	.17	2.62	14.04
1909	.51	.50	.33	.00	.00	.54	4.04	1.36	1.25	.00	.87	.81	10.21
1910	1.02	T	.10	.08	T	.12	4.21	2.55	.30	.04	1.32	.06	9.80
1911	1.31	.99	.25	.27	.00	.07	1.57	2.06	2.65	1.23	T	.85	11.25
1912	.00	.37	2.12	.28	.32	.61	3.00	.96	.01	1.78	.00	.39	9.84
1913	.80	1.86	.12	.70	T	.08	1.32	1.21	.14	.22	1.98	.89	9.32
1914	.15	.52	1.18	.00	.49	1.31	2.94	3.45	.40	2.59	1.02	5.85	19.90
1915	1.33	1.68	.76	.35	.15	.14	2.39	1.51	.92	.00	1.04	2.35	12.62
1916	4.00	.58	.50	.51	.00	.07	2.03	2.26	1.29	1.10	.00	.81	13.15
1917	1.92	.44	.15	.28	.82	.00	3.90	2.31	.88	T	.00	.00	10.70
1918	1.40	1.26	.32	.04	.18	.34	1.54	.78	.13	.68	1.04	1.41	9.12
1919	.26	.87	.63	1.10	.82	.32	5.53	1.82	2.54	.35	3.13	.64	18.01
1920	2.29	1.00	1.96	.16	.21	.56	.25	2.84	.74	.55	.01	.15	10.72
1921	.34	.47	.13	.62	T	.22	6.24	1.79	3.01	.25	.59	.12	13.78
1922	1.20	.20	1.36	.76	.15	.44	1.73	1.18	1.73	.22	.32	.10	9.39
1923	.27	.36	.65	.53	.05	.00	3.00	4.06	.23	.00	3.43	2.64	15.22
1924	.00	T	1.65	.41	T	.17	1.15	.08	.19	.16	.61	.65	5.07
1925	.04	.07	.15	.36	T	.86	1.20	1.52	2.95	1.08	1.24	.33	9.80
1926	.64	.67	1.60	1.42	.60	.01	.70	.10	2.82	1.36	.34	1.89	12.15
1927	.07	1.02	1.40	.44	.01	.20	1.31	1.51	2.34	T	.09	1.33	9.72
1928	.00	.83	.00	.03	.09	.09	1.78	2.28	.36	.08	.44	.52	6.50
1929	.28	.49	.17	.17	T	.10	1.94	1.62	4.28	.07	.05	.16	9.33
1930	.81	1.23	2.32	.57	.93	1.12	1.03	1.47	.37	.09	1.04	.29	11.27
1931	.68	2.95	.16	.48	1.34	.49	1.07	3.96	.94	.05	3.72	.42	16.26
1932	.74	1.27	.40	.32	T	.16	2.58	1.61	.23	1.62	.00	2.01	10.94
1933	.93	.24	.00	.03	.00	.10	1.60	2.23	1.62	2.00	.47	.38	9.60
1934	.50	.30	.39	.03	.05	.14	1.16	2.41	1.07	T	.50	2.04	8.59
1935	1.25	2.43	1.46	T	.14	T	.87	5.61	.88	.00	1.89	1.24	15.77
1936	.96	.92	.55	.07	T	.06	2.82	3.03	1.51	.34	1.13	.85	12.24
1937	1.62	.23	.63	.01	.25	T	2.06	1.29	1.43	.05	.19	.67	8.43
1938	.65	.88	.43	.08	.11	2.07	.78	2.37	.50	.00	.09	.93	8.89
1939	.35	1.60	.69	.04	.00	T	.61	1.24	1.53	.18	.54	.27	7.05
1940	.45	1.42	.04	.21	.52	1.19	.68	3.51	1.89	.17	1.75	3.07	14.90
1941	1.43	2.27	1.46	1.06	.74	T	2.51	1.99	1.20	.53	.65	2.01	15.85
1942	.50	1.92	.23	.79	.00	.00	.68	.90	1.78	.60	T	.47	7.87
1943	.44	.39	1.27	.03	.89	.13	1.09	3.04	3.59	.25	.00	.79	11.91
1944	.36	1.10	1.01	.56	.37	.04	1.77	1.78	2.08	1.13	1.78	1.55	13.53
1945	.58	.47	.53	.11	.00	.00	2.84	4.31	.14	1.13	.00	.47	10.58
1946	2.22	.22	.50	.14	.00	.04	2.44	3.61	2.26	.82	1.10	.46	13.81
1947	.14	.02	.39	T	.04	.05	.27	2.24	.47	.80	.70	.41	5.53
1948	T	2.00	.29	T	.00	.06	3.02	1.08	1.11	.56	.06	.93	9.11
1949	1.19	.20	.19	.38	.00	.02	1.42	1.92	.81	.52	.17	.84	7.66
1950	.30	1.48	.26	T	.01	1.24	3.72	.86	1.15	T	T	.27	9.29

From records: U of A Weather Station - January, 1900 to May, 1940.
Weather Bureau Office - June, 1940 to December, 1950.

MONTHLY AND SEASONAL DEGREE DAYS

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1934-35	0	0	0	18	276	394	395	276	310	63	41	0	1773
1935-36	0	0	0	56	317	413	493	341	246	83	6	0	1955
1936-37	0	0	0	36	171	444	738	344	281	95	0	0	2109
1937-38	0	0	0	0	176	333	389	302	233	83	22	0	1538
1938-39	0	0	0	20	327	368	455	542	218	32	0	0	1962
1939-40	0	0	0	29	120	280	385	352	169	61	0	0	1396
1940-41	0	0	0	36	255	269	383	241	241	175	33	0	1633
1941-42	0	0	0	59	159	405	372	399	285	93	6	0	1778
1942-43	0	0	0	31	82	328	375	190	125	48	0	0	1179
1943-44	0	0	0	43	118	386	458	414	269	95	4	0	1787

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1944-45	0	0	0	2	287	392	448	315	324	137	1	0	1906
1945-46	0	0	2	7	206	451	526	370	196	22	0	0	1780
1946-47	0	0	0	51	308	304	513	205	175	76	2	0	1634
1947-48	0	0	0	19	337	518	417	408	341	41	0	0	2081
1948-49	0	0	0	23	344	428	683	414	230	64	0	0	2186
1949-50	0	0	0	78	56	442	445	216	154	22	21	0	1434
1950	0	0	0	0	72	242							

REFERENCE NOTES

Unless otherwise indicated, dimensional units used in this bulletin are: temperature in degrees F.; precipitation and snowfall in inches; wind movement in miles per hour; and relative humidity in percent.

Sky cover is based on 0 for no clouds or obstructions to 10 for complete sky cover. Degree days are based on daily average temperatures of 65° F. Sleet and hail were included in snowfall totals, beginning with July, 1948.

Data for earlier years may be obtained by contacting Weather Bureau Office for which this summary was issued.

Heavy fog in the Means and Extremes Table also includes data referred to at various times in the past as "Dense" or "Thick".

The upper visibility limit for heavy fog is 1/4 mile.

Below zero temperatures are preceded by a minus sign.

* Less than one half.
\- No record.
\+ Also on later dates, months, or years.
T Trace, an amount too small to measure.

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STATION HISTORY

The Weather Bureau Office at Tucson, Arizona was established on June 17, 1940, with a portion of the responsibility for the observational program retained by the CAA. Observations were taken over on a 24-hour basis by the Weather Bureau on August 2, 1940. Pilot balloon observations were begun in 1942. The station was opened in the Administration Building at the Tucson Municipal Airport, 5-1/2 miles east of the Post Office (now Davis-Monthan Air Force Base). Elevations above ground of the instruments at this location were: thermometers 5.0 feet, rain gage 4.5 feet, and anemometer 33.0 feet. In June, 1947, the rain gage was moved from the ground exposure to the roof of the Administration Building, where the top of the gage was 14.2 feet above the ground.

On October 14, 1948, the station was moved to its present location in the north end of Building No. 12 at the new Tucson Municipal Airport, 6-1/2 miles south of the Post Office. The first observation at the present office was taken at 5:30 p.m., October 14, 1948. The elevations above ground of the instruments are: thermometers 5.0 feet, rain gages 5.0 feet, and anemometer 32.6 feet. The office is located on an extensive concrete ramp, but the instrument shelter, telepsychrometer screen, and rain gages are mounted on an elevated grass plot 50' x 50' near the east side of the building. Pilot balloon observations were discontinued August 4, 1949.

Within a ten mile radius of the station, the terrain is mostly flat or gently rolling, with many dry washes. There is a general increase in elevation from north to southeast and south. The ground is sandy, and is covered with brush, cacti, and some small trees. Rugged mountain ranges and jutting hills surround the station. The higher mountains to the north, east, and south reach up to over 6000 feet above the airport, and are at distances from 25 to 40 miles. To the west are hills and smaller mountains ranging from 500 to 4000 feet in elevation, and all more than 5 miles distant.

NARRATIVE CLIMATOLOGICAL SUMMARY

As might be expected from its geographical situation, the climate of Tucson is characterized by an extremely long hot season, beginning in April and ending in October. From May through September, maximum temperatures above 90° are the rule, with the mean maximum temperature exceeding 100° in July. Under usual conditions, the diurnal temperature range is large, averaging almost 30°. Under extreme conditions, the diurnal range may exceed 40°. Clear skies or very thin cloudiness permit intense surface heating during daytime, and active radiational cooling at night, a process which is enhanced by the extreme dryness of the air. The average growing season in this area is approximately 250 days.

During the year, most of the precipitation falls in two main periods. Over half of the year's total is usually recorded in the period July through September 15th, when numerous convective type showers or thunderstorms of sporadic nature occur, often filling dry washes to overflowing. On occasions, torrential downpours may cause spectacular and destructive flash floods; short period falls of over 1.50 inches are not uncommon. Hail does not often fall in thunderstorms, and sleet is an almost unknown type of precipitation. The period providing the secondary precipitation maximum, December through March, sees more general, longer-lived rain storms which furnish much needed runoff for ground water. During these storms, snow often falls on the higher mountains, but snow in Tucson is rare, particularly accumulations exceeding an inch in depth.

Relative humidity shows a pronounced diurnal oscillation, in line with the usual great daily range in temperature. From the first of the year, the average relative humidity drops steadily until July and the beginning of the thunderstorm season. By the middle of September, and the end of this season, it begins to decrease again, resuming the upward climb in late November. Only occasionally during the summer is relative humidity high enough to produce any degree of physical discomfort, and then only for short periods. During the hot season, relative humidity values often fall below 10% during afternoons, and sometimes below 5%. The low average wet bulb temperature during hot weather makes evaporative type air coolers very effective in this area.

Tucson lies in a zone which receives more sunshine than any other section in the United States; the persistence of the bright sunshine being one of the most noteworthy features of the climate. Cloudless days are commonplace, and average cloudiness, much of it being very thin cirriform clouds, is low.

Surface wind velocities are generally light, with no important seasonal change. Occasional wind storms cause localized dust storms, particularly in the metropolitan section, where the ground has been disturbed in numerous development areas. During the spring months, wind velocities are sometimes high enough to cause some damage to trees and buildings. Wind directions and velocities are influenced to an important extent by the surrounding mountains. For example, at the University of Arizona in Tucson, the prevailing wind direction is NW, and at the Weather Bureau Office, 6.5 miles S, the prevailing direction is SE, with a nighttime prevailing direction of SE and a daytime direction of from W to NE. Highest wind velocities usually occur with winds from the SW and E.

The principal lithometeors observed in the area are dust and haze. The stabilizing effect of rapid radiational cooling during the evening hours, particularly in winter, brings about the concentration of layers of dust stirred up by traffic on unpaved roads in the outlying districts. These inversion layers are usually broken and diffused by noon of the following day. Normally, visibility values are quite high. Fog is a rare occurrence, as well as any concentration of smoke.

GPO 86-101160 600 3-7-51